

## 3535-LACTOSE (MONO) GAMMA IRRADIATED (Culture Media Ingredient)

### INTENDED USE

Used in media for tissue culture and therefore production of vaccines of viral origin including foot and mouth disease, polio, dengue, coxsackie B3 and many other viruses. Other uses include growth of *lactobacilli*, spore growth of clostridia and in fermentation procedures for hormone production.

### PRODUCT SUMMARY AND EXPLANATION

Lactose (Mono) Gamma Irradiated, an animal origin peptone, is the enzymatically hydrolyzed protein portion of milk whey. This supplement is a mixture of peptides, amino acids, and carbohydrates, both simple and complex. LACTOSE (Mono) Gamma Irradiated TBL to support the growth of many mammalian, bacterial, and insect cell types, and it has been used to produce both recombinant proteins and animal health vaccines. It is also used this supplement as an amino acid supplement for mammalian cell culture media.

### PRINCIPLE

Lactose (Mono) Gamma Irradiated contains high levels of essential amino acids. It is recommended for applications requiring a highly soluble source of amino acids and peptides. It is especially useful in fermentations, laboratory media and in tissue culture or suitable for vaccine production.

### INSTRUCTION FOR USE

LACTOSE (Mono) Gamma Irradiated TBL has been used as a nutritional source for lactobacilli. It is also useful for indole testing because of its high tryptophan content. Lactalbumin is frequently used in mammalian cell culture media as an amino acid supplement

### QUALITY CONTROL SPECIFICATIONS

<b>Appearance</b>	:	White crystalline powder, Odorless.smell.
<b>Solubility (2% soln. at 25oC)</b>	:	Freely soluble in water.
<b>Clarity (2% Soln. at 121 °C.)</b>	:	Clear solution.
<b>pH (0.5M in H<sub>2</sub>O, 25°C)</b>	:	4.0 – 6.0
<b>Chloride (Cl)</b>	:	NMT – 0.005%
<b>Sulphate (SO<sub>4</sub>)</b>	:	NMT – 0.005%
<b>Total Ash</b>	:	NMT – 0.05%
<b>Heavy Metal (Pb)</b>	:	NMT-0.0005%
<b>Iron (Fe)</b>	:	NMT-0.0005%
<b>Assay</b>	:	NLT – 99.5%
<b>Microbial Test</b>	:	Passes

### INTERPRETATION

Cultural Characteristic observed in 2% Lactose (mono) and 1.5% agar after incubation at 35-37°C for 18-24 hours.

Microorganism	ATCC	Growth	Acid	Gas
<i>Citrobacter freundii</i>	8090	luxuriant	positive reaction (yellow coloured)	positive reaction
<i>Enterobacter aerogenes</i>	13048	luxuriant	positive reaction (yellow coloured)	positive reaction

<i>Escherichia coli</i>	8739	luxuriant	positive reaction (yellow coloured)	positive reaction
<i>Klebsiella pneumoniae</i>	13883	luxuriant	positive reaction (yellow coloured)	positive reaction
<i>Proteus vulgaris</i>	13315	luxuriant	negative reaction, no colour change	negative reaction
<i>Serratia marcescens</i>	8100	luxuriant	negative reaction, no colour change	negative reaction
<i>Salmonella Typhi</i>	6539	luxuriant	negative reaction, no colour change	negative reaction
<i>Salmonella phimurium</i>	14028	luxuriant	negative reaction, no colour change	negative reaction

### PACKAGING

Standard packing is 500gm in plastic bottle. After packing tightly closed in a dry and well-ventilated place.

### STORAGE

Store at room temperature in cool place, Keep plastic bottle tightly closed in a dry and well-ventilated place. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

**Product Deterioration:** Do not use product if any contamination, discoloration or other sign of deterioration is found.

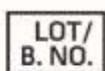
### DISPOSAL

After use, contact a licenced professional waste disposal service to dispose off this material. Dispose of as unused product.

### REFERENCES: NA



Quantity



Lot / Batch Number



Temperature Unit



Best Before



QR Code



Catalogue No.



Consults Instructions for use :



Manufacturer

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
Revision: 05<sup>th</sup> Oct. 2019